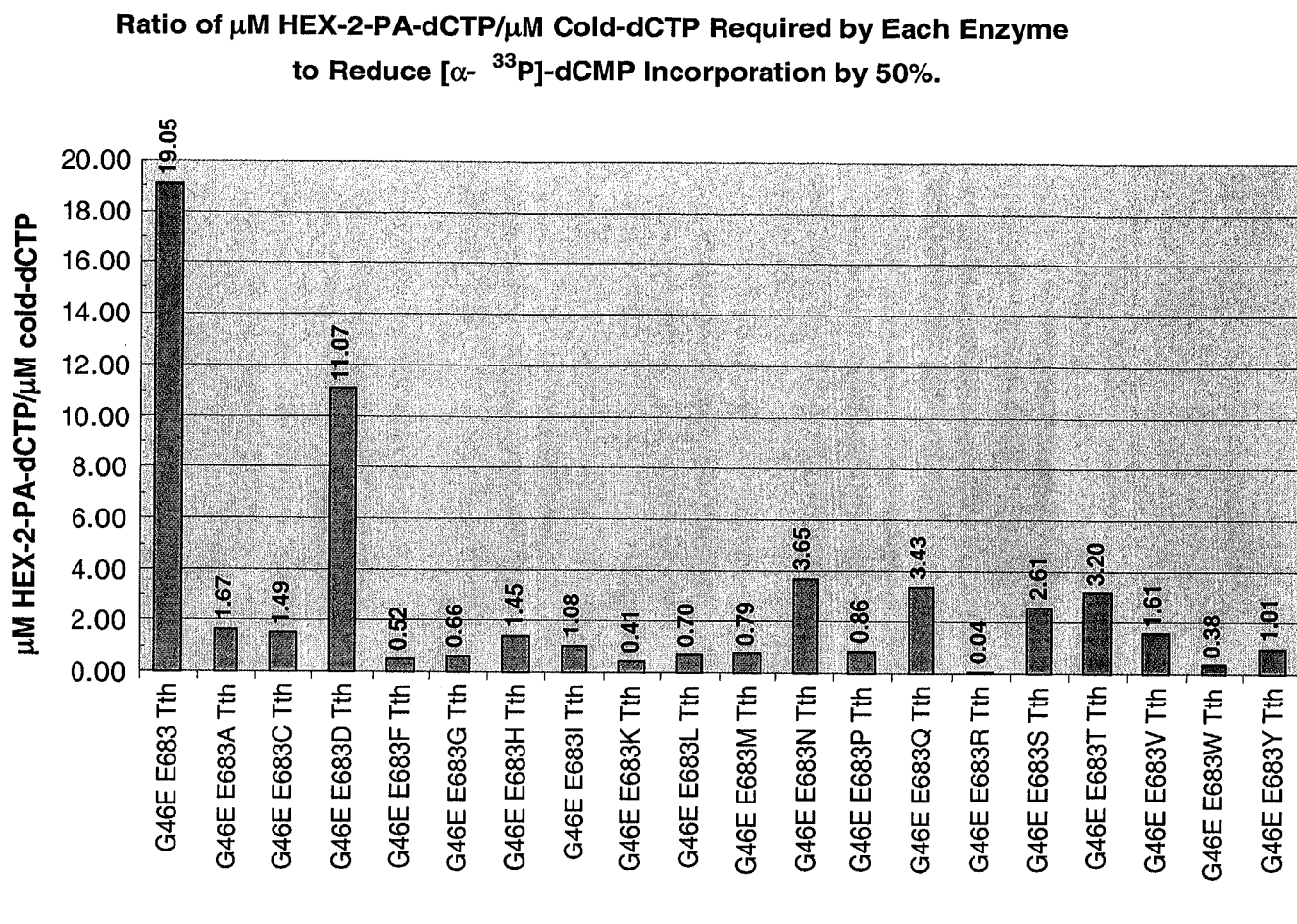


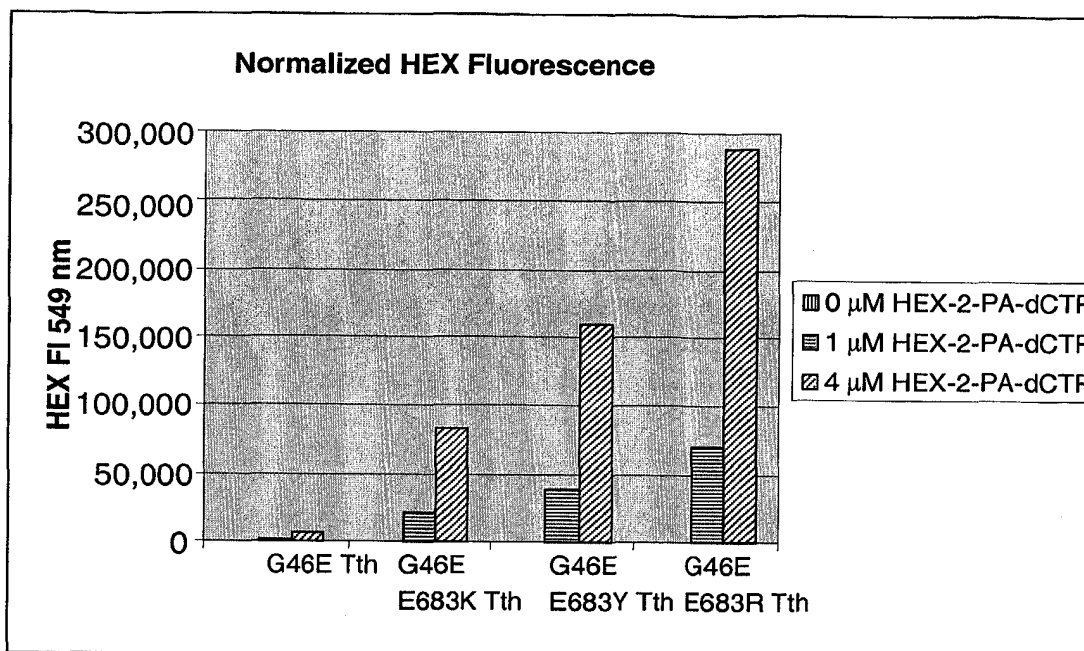


**Figure 1**





**Figure 2**



Enzyme	$\mu$ M HEX-dC	OD <sub>260</sub>	FL 549 nm - Normalized			Relative Fold Improvement	
			FI 549 nm	background	FI 549 nm	1 $\mu$ M HEX-dC	4 $\mu$ M HEX-dC
G46E Tth	0.0	0.0669	8,748	614	614		
	1.0	0.0655	9,476	1,342	1,370	1	
	4.0	0.0651	13,017	4,883	5,018		1
G46E E683K Tth	0.0	0.0760	8,702	568	500		
	1.0	0.0679	28,792	20,658	20,353	15	
	4.0	0.0672	91,522	83,388	83,015		17
G46E E683Y Tth	0.0	0.0659	7,402	-733	-744		
	1.0	0.0652	45,437	37,303	38,275	28	
	4.0	0.0649	162,440	154,306	159,061		32
G46E E683R Tth	0.0	0.0683	7,686	-449	-439		
	1.0	0.0654	76,334	68,200	69,764	51	
	4.0	0.0677	300,057	291,923	288,473		57

Average background FI 549 nm = 8135